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Operations and Services

Tropical Cyclone Weather Services Program, NWSPD 10-6

PRODUCTS

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Signed by Gregory A. Mandt June 7, 2002
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TROPICAL CYCLONE PRODUCTS

NOTE: Refer to appendix A for tropical cyclone product examples.

1. Tropical Cyclone Forecast and Advisory Products.

1.1 **Tropical Cyclone Public Advisories (TCP).** The TCP is the primary tropical cyclone information product issued to the public. The National Hurricane Center (NHC), as a part of the Tropical Prediction Center (TPC), the Central Pacific Hurricane Center (CPHC) and Weather Forecast Office (WFO) Tiyan, Guam, will issue TCPs on the criteria set in section 1.1.1.

1.1.1 **Issuance Criteria.** In the Atlantic and central Pacific, NHC and CPHC will issue TCPs for all tropical cyclones. In the eastern Pacific, NHC will issue public advisories when watches or warnings are required, or the tropical cyclone is otherwise expected to impact nearby land areas. In the western Pacific, WFO Guam will issue public advisories for all tropical cyclones expected to affect land within 48 hours. Issue the initial advisory when data confirm a tropical cyclone has developed. The title of the advisory will depend upon the intensity of the tropical cyclone as listed below.

- a. A tropical depression advisory refers to a tropical cyclone with 1-minute sustained winds up to 33 knots (38 mph).
- b. A tropical storm advisory will refer to tropical cyclones with 1-minute sustained surface winds 34 to 63 knots (39 to 73 mph).
- c. A hurricane/typhoon advisory will refer to tropical cyclones with winds 64 knots (74 mph) or greater.

Public advisories will discontinue when the tropical cyclone:

- a. Becomes extratropical
- b. Drops below depression stage (dissipates or becomes a remnant low) or
- c. Moves inland and watches and warnings are no longer required.

1.1.2 **Issuance Times.** NHC and CPHC will issue public advisories at 0300, 0900, 1500, and 2100 Coordinated Universal Time (UTC) with valid position times corresponding to the advisory time. WFO Guam issuance times are 0400, 1000, 1600, and 2200 UTC.

1.1.3 **Format and Content.** Advisories can begin with a lead statement or headline to emphasize significant aspects of the tropical cyclone. Advisories will list watches and warnings for hurricane/typhoon and tropical storm conditions immediately after the headline. Separate the headline and watch/warning section from the rest of the advisory. Include information in the rest of the advisory in descending order of importance or urgency. At the end of the advisory, repeat the tropical cyclone position, maximum winds, minimum pressure, present movement, and provide forecast movement (if

change is indicated). Provide the time and office responsible for the next advisory along with new message headers if the tropical cyclone is passed to another Center. Finally, include the forecaster's name at the end of the message.

Do not use the term "SMALL CRAFT ADVISORY." Instead, use the phrase "SMALL CRAFT SHOULD STAY IN PORT." This is considered equivalent or even stronger when used in connection with tropical or subtropical cyclones. When discontinuing tropical cyclone warnings for a given coastal section where small craft advisories are to remain in effect, use the following statement: "SMALL CRAFT ADVISORIES REMAIN IN EFFECT FOR PORTIONS OF THE COAST. SEE LOCAL NWS COASTAL FORECASTS FOR CONDITIONS IN YOUR AREA." The NHC advisory discontinuing tropical cyclone warnings and the following NHC advisory, if one is issued, should contain this statement.

1.1.3.1 Units. Times in advisories should be local time of the affected area; however, local time and UTC should be used when noting the storm's location. All advisories will use statute miles and statute miles per hour. The Tropical Cyclone Center, at its discretion, may use nautical miles/knots in parentheses immediately following statute miles/mpH. Advisories should include the metric units of kilometers and kilometers per hour following the equivalent English units except when the United States is the only country threatened.

1.1.3.2 Tropical Storm/Hurricane Watches and Warnings. NHC, CPHC and WFO Guam, will issue tropical storm/hurricane watches if tropical storm/hurricane conditions are possible over land areas within 36 hours, except 48 hours in the western north Pacific. Do not issue tropical storm watches if the tropical cyclone is forecast to reach hurricane/typhoon intensity within the watch period.

Issue tropical storm/hurricane warnings when tropical storm/hurricane conditions along the coast are expected within 24 hours. Issue tropical storm warnings at the discretion of the hurricane specialist when gale warnings, not related to the pending tropical storm, are already in place. Tropical storm warnings may be issued on either side of a hurricane/typhoon warning area.

Advisories will list all tropical cyclone watches and warnings in effect. The first advisory in which watches or warnings are mentioned should give the effective time of the watch or warning, except when it is being issued by other countries and the time is not known.

Except for tropical storms and hurricanes/typhoons forming close to land, a watch should precede a warning. Once a watch is in effect, it should either be replaced by a warning or remain in effect until the threat of the tropical cyclone conditions has passed. A hurricane/typhoon watch and a tropical storm warning can be in effect for the same section of coast at the same time. It is not advantageous to step down warnings for tropical cyclones. This approach would cause confusion for the media and public, and this is especially true for tropical cyclones whose tracks parallel the coast.

1.1.3.3 Location and Movement. All advisories will include the location of the center of the tropical cyclone by its latitude and longitude, and distance and direction from a well known point, preferably

downstream from the tropical cyclone. If the forecaster is unsure of the exact location of a depression, the position may be given as within 50, 75, etc., miles of a map coordinate. When the center of the tropical cyclone is over land, give its position referencing the state or country in which it is located and in respect to some well known city, if appropriate.

Movement forecasts apply to the tropical cyclone's center. Give the present movement to 16 points of the compass if possible. Include a 24-hour forecast of movement in terms of a continuance or departure from the present movement and speed. This may be reduced to a 12-hour forecast. Uncertainties in either the tropical cyclone's location or movement should be explained in the advisory. An outlook beyond 24 hours (out to 72 hours when appropriate) may be included in the text of the advisory.

Make landfall forecasts of the center with caution to avoid giving the public any false sense of security. Use other forecast parameters to describe the center's landfall. When a threat to land exists, stress the tropical cyclone's effects extend well beyond the small area near the tropical cyclone's center.

1.1.3.4 Wind and Intensity. Give maximum observed 1-minute sustained surface wind speed. During landfall threats, specific gust values and phrases like “briefly higher in squalls” may be used. Also include the area (or radius) of both tropical and hurricane force winds. When warnings are in effect, give the expected times of onset of tropical storm and hurricane/typhoon force winds along the coast in general terms, such as “this afternoon” or “tonight.”

Provide intensity forecasts for 12 hours only stated as an “increase,” “decrease,” or “no change” from the present intensity. The storm may also be compared to some memorable hurricane or referred to by relative intensity. Where appropriate, use the Saffir/Simpson Hurricane Scale (SSHS) in public releases.

1.1.3.5 Pressure. Provide central pressure values in millibars and inches as determined by available data.

1.1.3.6 Storm Surge. Storm surge forecasts should highlight areas along the coast and within bays that are likely to experience dangerous flooding from storm surge. When possible, timing should be estimated or should be referenced to storm position, e.g. “as the hurricane is making landfall,” or “as strong winds turn to the southwest.” Wave information should be included for the outer coastline when possible. Storm surge heights should be indicated as values above the normal, predicted astronomical tide level. Note should be made of abnormally high or low astronomical tides, and their times of occurrence.

1.1.3.7 Inland Impacts. Highlight the inland impacts of tropical cyclones in advisories. This includes the threat of strong winds, heavy rainfall, flooding, and tornadoes. Include the extent and magnitude of inland winds as well as anticipated rainfall amounts and potential for flooding and tornadoes. Mention tornado and flood watches as appropriate. Mention actual occurrences of tornadoes, floods, and high winds adding a note of urgency and supporting warnings and statements from WFOs.

Action statements in advisories should be general with references to local office products for specific recommended actions. To further publicize local products, when a tropical cyclone threatens a land area, include the following statement in the TCP: "For storm information specific to your area...please monitor products issued by your local weather office." If HPC is going to issue public advisories, the last NHC TCP should carry a statement similar to..."THIS IS THE LAST PUBLIC ADVISORY ISSUED BY THE NATIONAL HURRICANE CENTER ON ALLISON. FUTURE INFORMATION ON THIS SYSTEM CAN BE FOUND IN PUBLIC ADVISORIES ISSUED BY THE HYDROMETEOROLOGICAL PREDICTION CENTER...UNDER AWIPS HEADER TCPAT(1-5) AND WMO HEADER WTNT(31-35) KWNH...BEGINNING AT 10 AM CDT."

1.1.4 Intermediate Public Advisories. Issue these products on a 2- to 3-hourly interval between scheduled advisories (see times of issuance below). Issue 3-hourly intermediate advisories whenever a tropical storm or hurricane watch/warning is in effect. Issue 2-hourly intermediates whenever tropical storm or hurricane warnings are in effect and coastal radars are able to provide responsible Tropical Cyclone Centers with a reliable hourly center position. For clarity, when issuing intermediate public advisories, include a statement at the end of the scheduled public advisory informing customers when an intermediate advisory will be issued, i.e., "AN INTERMEDIATE ADVISORY WILL BE ISSUED BY THE CENTRAL PACIFIC HURRICANE CENTER AT 2 PM PST FOLLOWED BY THE NEXT COMPLETE ADVISORY ISSUANCE AT 5 PM PST."

Do not use intermediate advisories to issue tropical cyclone watches or warnings. They can be used to clear all, or parts of, a watch or warning area. Content should be similar to the scheduled advisory.

- a. Three hourly issuances...TPC/CPHC at 0000, 0600, 1200, and 1800 UTC. WFO Guam at 0100, 0700, 1300, and 1900 UTC.
- b. Two hourly issuances...TPC/CPHC at 2300, 0100, 0500, 0700, 1100, 1300, 1700, and 1900 UTC. WFO Guam at 0000, 0200, 0600, 0800, 1200, 1400, 1800, and 2000 UTC.

1.1.5 Special Public Advisories. Special public advisories are unscheduled and issued whenever an unexpected change has occurred requiring a revised forecast or a tropical storm/hurricane watch or warning.

1.2 Tropical Cyclone Forecasts/Advisories (TCM). NHC and CPHC will prepare these products for all tropical cyclones within their area of responsibility. They will be issued and cease under the criteria given in section 1.1.1

1.2.1 Issuance Times. Issue advisories at 0300, 0900, 1500, and 2100 UTC.

1.2.2 Format and Content. Tropical cyclone forecasts/advisories will contain appropriate information as shown in appendix A in a standard format. All forecast advisories will contain 12-, 24-, 36-, 48-, and 72-hour forecast positions, and 1-minute surface wind speeds (intensity) and 34- and 50-knot

(four-quadrant) wind speed radii. It will also contain forecast 64-knot wind speed radii at 12-, 24-, and 36-hours. No position or wind speed will accompany the forecast of “dissipated.” A standard statement indicating the uncertainty associated with the 48- and 72-hour forecast positions will precede those two forecasts.

NOTE: As part of the header, append a code string at the end of the line “NATIONAL WEATHER SERVICE MIAMI FL.”

Format: NATIONAL WEATHER SERVICE MIAMI FL BSNOYR
where: (BS) is the basin (AL, EP or CP)
where: (NO) is the tropical cyclone number (01, 02, 03,...99)
where: (YR) is the last two digits of the year.

A special tropical cyclone forecast/advisory updates a scheduled advisory if unexpected changes have occurred in a tropical cyclone. Content of the special advisory will reflect significant changes requiring the special advisory to be issued. Issue special tropical cyclone forecast/advisories in conjunction with the issuance of a special public advisory.

1.3 Tropical Cyclone Discussion (TCD). Tropical Cyclone Centers issue this product to explain forecasters’ reasoning behind analysis and forecast of the tropical cyclone. They will be issued and cease under the criteria given in section 1.1.1.

1.3.1 Issuance Times. NHC and CPHC will issue tropical cyclone discussions at 0300, 0900, 1500, and 2100 UTC and with all special advisories.

1.3.2 Format and Content. Discussions include prognostic reasoning; objective techniques employed; NHC, CPHC, and Hydrometeorological Prediction Center (HPC) guidance used; coordinated 12-, 24-, 36-, 48-, and 72-hour tropical cyclone forecast points. No position or wind speed will accompany the forecast of “dissipated.” Also provide maximum sustained wind speed forecasts for each forecast point; other meteorological decisions; and plans for watches and warnings.

1.4 Tropical Cyclone Updates (TCU). These products, brief statements issued by Tropical Cyclone Centers are in lieu of or preceding special advisories, inform of unexpected changes in a tropical cyclone or post or cancel watches and warnings.

1.5 Tropical Cyclone Position Estimate (TCE). Tropical Cyclone Centers and WFO Guam will issue a TCE between 2-hourly intermediate public advisories whenever sufficient reliable radar center fix information is available. Position estimates provide location in latitude/longitude coordinates, distance, and direction from a well known point. Transmit position estimates near the beginning of the hour. Local weather offices will use this information in all official statements.

1.6 Strike Probabilities of Tropical Cyclone Conditions (SPF). NHC will issue probabilities for all named storms in the Atlantic Basin when there is a 72-hour strike probability of one percent or higher

at any land location, and for tropical depressions forecast to become named storms when they are a threat to land. This product will describe the probability of tropical cyclone conditions in tabular form at the regularly scheduled public advisory times and when special public advisories are issued. Include maximum values over water points when a tropical cyclone is forecast to move parallel to a coastline.

1.6.1 Exceptions. Two conditions in which probabilities should not be issued are: (1) the tropical cyclone/tropical storm has made landfall and is not expected to reemerge over water, and/or (2) computed probability values are not significant. At the discretion of the hurricane forecaster, probabilities need not be listed for sites where the tropical storm or hurricane would likely be over land or less than tropical storm strength at the time it would affect the site.

1.6.2 Format. Compute the probabilities shortly after synoptic times for the periods 0-24, 24-36, 36-48, and 48-72 hours. Show a total probability for the next 72 hours in the last column, representing a total of all forecast periods. Indicate in the table with an "X" if the probability for a location is less than 1 percent. Indicate in the public advisory and tropical cyclone forecast/advisory if probabilities are not issued. NHC may include a brief explanation of probabilities in the advisory. Refer to Probability of Hurricane/Tropical Storm Conditions: A User's Manual for further information.

Compute probabilities for the following locations:

Brownsville, Texas
 Corpus Christi, Texas
 Port O'Connor, Texas
 Galveston, Texas
 Port Arthur, Texas
 New Iberia, Louisiana
 New Orleans, Louisiana
 Buras, Louisiana
 Gulfport, Mississippi
 Mobile, Alabama
 Pensacola, Florida
 Panama City, Florida
 Apalachicola, Florida
 St. Marks, Florida
 Cedar Key, Florida
 Tampa, Florida
 Venice, Florida
 Fort Myers, Florida
 Marco Island, Florida
 Key West, Florida
 Marathon, Florida
 Miami, Florida
 West Palm Beach, Florida
 29N 85W
 29N 87W
 28N 89W
 28N 91W

Ft. Pierce, Florida
 Cocoa Beach, Florida
 Daytona Beach, Florida
 Jacksonville, Florida
 Savannah, Georgia
 Charleston, South Carolina
 Myrtle Beach, South Carolina
 Wilmington, North Carolina
 Morehead City, North Carolina
 Cape Hatteras, North Carolina
 Norfolk, Virginia
 Ocean City, Maryland
 Atlantic City, New Jersey
 New York, New York
 Montauk Point, New York
 Providence, Rhode Island
 Nantucket Island, Massachusetts
 Hyannis, Massachusetts
 Boston, Massachusetts
 Portland, Maine
 Bar Harbor, Maine
 Eastport, Maine
 28N 93W
 28N 95W
 27N 96W
 25N 96W

NOTE: Do not issue probabilities for the west coast of the continental United States, Hawaii, Guam, or Micronesia.

2. Subtropical Cyclone Forecast and Advisory Products.

2.1 Subtropical Cyclone Public Advisories (TCP). Tropical Cyclone Centers will issue subtropical cyclone advisories. However, due to the lack of well-defined criteria for distinguishing subtropical from non-tropical lows, marginally-subtropical systems may be handled as non-tropical gale or storm centers in High Seas forecast products. Format and content of these products are similar to the public tropical cyclone advisory. (See appendix A for an example). Title the advisories “SUBTROPICAL DEPRESSION ##” and in the message body refer to the depression as “SUBTROPICAL DEPRESSION ##.” If winds reach subtropical storm strength, the storm receives the next available name. Title the advisories “SUBTROPICAL STORM (name)” and in the body message refer to the storm as “SUBTROPICAL STORM (name).” List information in order of importance with a lead statement, when appropriate, followed by a summary of all coastal warnings. Use latitude and longitude coordinates to identify the center of the storm. Issue these advisories at the same scheduled times as public tropical cyclone advisories.

Special Subtropical Public Cyclone Advisories will be issued to (1) update previously scheduled advisories whenever an unexpected significant change has occurred in the cyclone or (2) to issue warnings.

2.2 Subtropical Cyclone Forecast/Advisory (TCM). Issue these advisories for all subtropical cyclones within a Tropical Cyclone Center's area of responsibility. Write the advisory in the same format and content as the tropical cyclone forecast/advisories. Title the advisories “SUBTROPICAL DEPRESSION ##” and in the message body refer to the depression as “SUBTROPICAL DEPRESSION ##.” If winds reach subtropical storm strength, the storm receives the next available name. Title the advisories “SUBTROPICAL STORM (name)” and in the body message body refer to the storm as “SUBTROPICAL STORM (name).” Issue these at the same times as scheduled tropical cyclone forecast/advisories.

Special Subtropical Cyclone Forecast/Advisories are issued to update any unexpected change which occurred with the subtropical cyclone. Format remains the same as the scheduled advisory being replaced. Issue these with every special subtropical cyclone public advisory.

3. Numbering and Naming Tropical and Subtropical Cyclones.

3.1 Numbering and Naming Tropical Cyclones. Tropical Cyclone Centers will number tropical depressions in their areas of responsibility. Number tropical depressions consecutively beginning each season with the spelled out number “ONE.” In the north Pacific, for ease in differentiation, tropical depression numbers, assigned by NHC or CPHC, will include the suffix “E” for eastern (east of 140° west longitude) or “C,” for central (180° to 140° west longitude) respectively, after the number. In

both the Atlantic and Pacific, once the depression reaches tropical storm intensity, name it and drop the depression number. The depression number will not be used again until the following year. Give tropical cyclones a name in the first advisory after intensifying to 34 knots (39 mph) or greater.

The following rules apply for tropical cyclones passing from one basin to another: Retain the name if a tropical cyclone passes from one basin into another basin as a tropical cyclone, i.e. advisories are continuous. An unnamed tropical depression will also retain its number (e.g. Tropical Depression Six-E remains Tropical Depression Six-E) if it crosses into another area of responsibility. For unnamed tropical depressions moving from west to east across 180°, CPHC will use the same number as previously assigned by the Region Specialized Meteorological Center (RSMC) Tokyo. Additionally, CPHC will provide the associated Joint Typhoon Warning Center (JTWC) number, if different, in parentheses.

Within a basin, if the remnant of a tropical cyclone redevelops into a tropical cyclone, it is assigned its original number or name. If the remnants of a former tropical cyclone regenerate in a new basin, the regenerated tropical cyclone will be given a new designation.

3.2 Numbering and Naming Subtropical Storms. A single list of numbers and names will be used for all tropical and subtropical cyclones. Therefore, numbering of subtropical depressions will follow the same procedure as tropical depressions. For example, if the first subtropical depression follows the first tropical depression, the subtropical depression will be given the designation SUBTROPICAL DEPRESSION TWO. If a subtropical depression becomes a subtropical storm, it receives the next available name in the tropical cyclone naming sequence.

4. Numbering Advisories and Tropical/Subtropical Cyclone Discussions. Number tropical and subtropical cyclone advisories and discussions in the Atlantic and the Pacific similarly. Number scheduled and special advisories and TCDs consecutively beginning with the number 1 (not spelled out) for each new tropical or subtropical cyclone, and continue through the duration of the cyclone. In situations where only TCMs and TCDs are being written (tropical cyclones in the eastern Pacific not threatening land) and at a later time a public advisory is required, the public advisory number will match the corresponding TCM. In both the Atlantic and the Pacific, intermediate advisories and TCDs will retain the advisory number of the scheduled or special advisory they update and append an alphabetic designator (i.e., "HURRICANE ALLISON INTERMEDIATE ADVISORY NUMBER 20A").

5. Other Tropical Cyclone Centers and NCEP Products.

5.1 Satellite Interpretation Message (SIM). CPHC will issue these products four times a day for the Hawaiian Islands, with updates as required, describing synoptic features and significant weather areas. Transmit messages at 0530, 1130, 1730, 2330 UTC.

5.2 Tropical Weather Discussion (TWD). TPC's Tropical Analysis Forecast Branch (TAFB) and CPHC will issue these discussions to describe major synoptic weather features and significant areas of disturbed weather in the tropics. One TAFB discussion will cover the Gulf of Mexico, the Caribbean,

and the Atlantic between the equator and 32° north latitude and be transmitted at 0605, 1205, 1805, 0005 UTC. A second TAFB message for the eastern Pacific between the equator and 32° north and east of 140° west will be transmitted at 0405, 1005, 1605, and 2205 UTC. CPHC/WFO Honolulu will prepare messages for the north Pacific (30°N to the equator, 140°W to 180° and 25°S to the equator, 120°W to 180°) and a second one for the South Pacific (30°N to 25°S, 180° to 100°E) to be transmitted at 1000 and 2200 UTC.

5.3 Tropical Weather Outlook (TWO). NHC and CPHC will prepare the TWO during their respective tropical cyclone seasons. The outlook covers tropical and subtropical waters and discusses areas of disturbed weather and the potential for tropical cyclone development during the next 48 hours. The outlook will mention tropical and subtropical cyclones, including the system's location (in either general terms or map coordinates), status, and change in status. For the first 24 hours of a tropical cyclone, the outlook will include a statement identifying the NWS product header and WMO headers for the advisory (appendix B). In the Atlantic, transmission times are 0530, 1130, 1730, and 2230 Eastern local time. In the eastern Pacific, transmission times are 0400, 1000, 1600, and 2200 Pacific local time; and in the central Pacific, 0200, 0800, 1400 and 2000 UTC.

5.4 Tropical Weather Summary (TWS). Each Tropical Cyclone Center will prepare this product each month summarizing the previous month's tropical cyclone activity. The last TWS of the season will summarize November's activity plus the activity for the whole tropical cyclone season. Summaries for each month are due the first day of the next month.

5.5 Special Tropical Disturbance Statement (DSA). TPC and CPHC will issue these products providing information on strong formative, non-depression systems and will focus on major threats of the disturbance, such as the potential for torrential rains on islands or inland areas. TPC and CPHC will coordinate with appropriate local NWS weather offices.

5.6 Tropical Cyclone Summary - Fixes (TCS). CPHC/WFO Honolulu will issue these products when a tropical cyclone is classifiable using the Dvorak technique. Products will be issued for the north central Pacific from 140° west to 180° and for the south central Pacific from 120° west to 160° east. After the initial tropical cyclone fix, succeeding products will be done at approximately 0000, 0600, 1200, and 1800 UTC as long as the system is classifiable.

5.7 HPC Public Advisories (TCP). The HPC will issue public advisories after subtropical and named tropical cyclones have moved inland, NHC advisories have been discontinued and the storm system remains a threat to inland areas primarily due to heavy rain and flash flooding. Advisories will not be issued for storms entering the coast of Mexico not posing an immediate flash flood threat to the conterminous United States. Advisories are issued at 0300, 0900, 1500, and 2100 UTC. They will continue to be numbered in sequence with tropical cyclone advisories and will reference the former storm's name in the text. Content will refer to the decaying system's position, intensity, general forecast trends, highlight impacts which occurred and are expected to occur (usually in relation to heavy rain/flooding and tornadoes), and indicate when the next summary will be issued. Advisories will

terminate when the threat of flash flooding has ended or when the remnants of these storms can no longer be distinguished from other synoptic features capable of producing flash floods.

5.8 Tropical Cyclone Reports. NHC and CPHC will prepare a final track chart and tropical cyclone report for each tropical cyclone occurring in their area of responsibility. The tropical cyclone report will include landfall and 6-hourly synoptic track and intensity data (i.e. the “best track”). The report will be released no later than 90 days after the last advisory on each tropical cyclone. NHC will post reports on the Internet at www.nhc.noaa.gov/pastall.html and CPHC at www.prh.noaa.gov/pr/hnl/cphc. Any changes to the best track for the Atlantic and east Pacific will be made by NHC’s Best Track Committee. Reviews at CPHC will be conducted by the director and deputy director CPHC, WFO Honolulu warning coordination meteorologist and hurricane program leader.

6. WFO Products.

6.1 Hurricane/Typhoon Local Statements (HLS). WFOs with coastal county responsibilities will issue these unnumbered products which are very specific and designed to inform media, local decision makers, and the public on present and anticipated storm effects in their county warning area (CWA) and adjacent coastal waters. Keep HLSs as succinct as possible.

6.1.1 Issuance Criteria. WFOs with coastal responsibility will issue a HLS when its area of responsibility is affected by a tropical cyclone watch/warning or evacuation orders. Coastal WFOs have the option as to which of their inland counties will be included in a HLS. It is a regional option if inland WFOs issue HLSs. If an Inland Tropical Storm/Hurricane Wind Watch or Warning is issued, it will be issued under the non-precipitation warning product (NPW). Refer to section 6.3.

6.1.2 Issuance Times. When a tropical storm or hurricane is close to the coast, issue HLSs every 2 to 3 hours or more frequently as circumstances warrant. Do not release HLSs immediately before an advisory unless information is coordinated with the appropriate Tropical Cyclone Center and, for watches or warnings, the valid initiation time is specified. HLSs do not need to immediately follow the issuance of a new hurricane advisory. Issuing HLSs midway between advisories maintains a steady flow of information to the media and the public. Whenever a new advisory changes the potential impact on a local area, information needs to be distributed in a fresh HLS as soon as possible. Routine HLSs may cease when the tropical cyclone is no longer a threat to an office's CWA.

6.1.3 Content. HLSs will add localized details to Tropical Cyclone Center’s advisory releases and should not conflict with or repeat advisory information not directly applicable to the local office’s CWA. Before the first HLS, use public information statements (PNS) to inform the public on routine hurricane preparedness information. The first HLS can also contain standard preparedness messages. Information may be added to the end of the HLS describing where additional storm information can be found in supporting Center’s TCP and TCM as well as PNSs and NOWs (Short Term Forecast) issued by the local office.

HLSs should use tropical cyclone position estimates between advisories when appropriate. When tropical cyclones threaten the Samoas (American Samoa and Samoa), the two local offices will coordinate with RSMC Nadi, CPHC, and with each other to determine the best integrated and internally consistent forecast of conditions expected in the area.

The following table defines which products are issued via the normal suite of product headers during tropical cyclone watches/warnings and those products superseded by tropical cyclone watches/warnings and carried in a HLS. Severe thunderstorm warnings can be issued as stand-alone products at the discretion of the WFO. However, their use should be confined to peripheral events, such as outer rainbands, prior to sustained tropical storm or hurricane strength winds. Stand-alone special marine warnings will only be issued for tornadoes over water during tropical cyclone watch/warning situations. Issue initial inland tropical storm wind or inland hurricane wind watches/warnings as a standalone product; however, subsequent updates will be carried within the body of the HLS.

HLS Product Table

Product	Tropical Cyclone Watch/Warning	
	HLS	Stand-alone
Flash Flood Watch/Warning/Statement		X
Flood Warning		X
Tornado Warning		X
Inland Tropical Storm Wind or Inland Hurricane Wind Watch/Warning		X ¹
Severe Thunderstorm Warning		X ²
Coastal Flood Watch/Warning/Statement	X	
Special Marine Warning		X ³
Severe Weather Statement		X
Marine Weather Statement		X
Special Weather Statement	X	
Heavy/High Surf Advisory issued under the product Marine Weather Statement	X	

¹Issue all initial watches and warnings and cancel the watch/warning as a standalone product; however, updates will be carried within the body of the HLS.

²Can be issued as a stand-alone product at discretion of forecast offices prior to the onset of sustained tropical storm or hurricane force winds.

³For tornadoes over water only, otherwise combine with HLS.

6.1.4 **Format.** Use the standardized format with “headlines by hazard” (Reference appendix A). As appropriate, product header options are “Hurricane Local Statement,” “Tropical Storm Local Statement” or “Tropical Depression Local Statement.” Prepare each section of the HLS by a content/topic header set off by three dots before and after each header. Prioritize and adjust the order to focus on the greatest threat and the most important information impacting the area.

Essential contents of Hurricane Local Statements and Examples:

...Headline...

Concise lead sentence or headline.

...Areas Affected...

Details of which counties, parishes, or cities are included in the HLS.

...Watches/Warnings...

Watches and warnings in effect and counties or parishes to which they apply.

...Storm Information...

Present location, movement, and winds and expected time of onset of tropical storm/hurricane/typhoon force winds. Give timing of impacts in ranges or general terms such as “afternoon,” “evening,” and so on. Use the tropical cyclone forecast/advisory as guidance.

...Precautionary/Preparedness Actions...

Short-term precautionary actions and times they should be completed.

This includes any evacuation recommendations contained in the advisory or stated by local authorities. Listing these actions is particularly important once a tropical cyclone watch or warning is announced.

...Storm Surge Flood and Storm Tide Impacts...

Storm surge and storm tide (storm surge plus astronomical tide) information, including times various heights are expected, present heights, and their locations. Storm surge information must agree with Tropical Cyclone Center forecasts as included in the advisories. Include storm tide information because local officials might not have access to tide tables. Reference storm tide forecasts to appropriate datums understood by local authorities. For many portions of the coast, this would be mean sea level although some areas use mean lower low water.

...Wind Impacts...

Present winds and expected time of onset of tropical storm or hurricane force winds. (Use the tropical cyclone forecast/advisory as guidance.)

...Other Impacts...(Substitute appropriate header to reflect most important threat)

Any required statements on potential tornado and flood/flash flood threats, rip currents, beach erosion, high wind warnings inland, etc.

...Probability of Hurricane/Tropical Storm Conditions...

Information on probability of hurricane/typhoon/tropical storm conditions is optional.

...Next Update...

Time of next or final statement.

6.1.5 Relationship of HLSs to the NOW. The NOW is a stand-alone product focused on conditions impacting the office's CWA for the next 0 to 6 hours. It will complement the HLS by providing critical storm information in the first eight lines.

6.1.6 Optional Use of Special Weather Statements for Probability of Tropical Cyclone Conditions (SPS). Special weather statements (SPS) may be used to briefly describe tropical cyclone probabilities prior to HLS release. These statements may be issued up to four times a day following the issuance of probabilities in the 0300, 0900, 1500, and 2100 UTC hurricane or tropical storm advisories, or following the issuance of special advisories. Refer to the probabilities in the "totals" column instead of various time periods. Include the probability for your area with an explanation on how such a probability compares to the surrounding coastal sections.

6.2 Tornado and Flash Flood Warnings (TOR/FFW). Issue warnings when conditions warrant.

6.3 Inland Tropical Storm/Hurricane Wind Watch or Warning (NPW). When a tropical cyclone is expected to remain at tropical storm or hurricane intensity inland, WFOs will issue inland tropical storm or hurricane wind watches and warnings under the non-precipitation warning product (NPW). The NPW will be exclusively used for this product's issuance and cancellation. However, subsequent statements, such as updates, will be placed in the HLS. A headline will be "Inland Tropical Storm Wind Watch (or Warning)" or "Inland Hurricane Wind Watch (or Warning)." Watches should not normally be issued beyond the second period of the forecast or warnings beyond the first period. Use the wind fields from the Tropical Cyclone Forecast/Advisory as guidance. When the effects of the tropical cyclone can be clearly described to the public and not lead to confusion, inland sections of *coastal* counties may be placed under inland tropical storm/hurricane wind watch or warning versus using tropical cyclone watches or warnings. Coordination will occur with all impacted offices and NHC before issuance. The appropriate forecasts and statements will highlight watches and warnings.

6.4 Inland Tropical Storm/Hurricane Wind Watch or Warning for Subtropical Storms. WFOs will issue an inland tropical storm wind watch or warning, or inland hurricane wind watch or warning when a subtropical storm is expected to spread tropical storm or hurricane force winds inland. Use same procedures as noted in section 6.3.

6.5 Post-Tropical Cyclone Reports (PSH). All WFOs issuing HLSs will prepare post-storm reports. Inland offices issuing inland tropical storm/hurricane wind watches or warnings will also submit

reports. At the request from Tropical Cyclone Center(s) through the appropriate regions, other WFOs will prepare post-storm reports. Transmit the reports within 5 days following the transmission of the last HLS or inland tropical storm/hurricane wind watches or warnings addressed to the appropriate Tropical Cyclone Center or National Center and a copy to WSH, W/OS21. Amend reports as needed.

6.5.1 Content. Include the following items in the initial report and in any subsequent updated reports:

- a. Wind data: Report highest 1-minute sustained surface wind speed (knots), peak gust (knots), and date/times of occurrence in UTC. Specify anemometer height (feet) if other than 33 feet and duration (minutes) if other than a 1-minute sustained average. Report all NWS, DOD, and Federal Aviation Administration official observing sites in a NWS office's CWA including ASOS sites, all NOAA buoy and Coastal Marine Automated Network (C-MAN) stations in the office's CWA, and all other reliable data collected by government sources or other institutions in the office's CWA. These include reports from stations maintained by the U. S. Coast Guard; state, county, and local governments; universities; private companies; and experimental networks. List adjusted speeds corrected for instrument type and speed range if known. Data reports from the public are optional. However, NWS offices should encourage these data and include them in the PSH when considered reliable.
- b. Pressure data: Report lowest sea level pressure (millibars), and date/time of occurrence (UTC). Report data from all sources given in Section a.
- c. Storm total rainfall: Report amount (inches) and duration (dates). In addition, list maximum 1-, 6-, 12-, and 24-hour amounts (inches) identifying date/time (UTC) of occurrence. Report data from all sources given in Section a.
- d. Maximum storm tide heights: Reference storm tide to appropriate datums understood by local authorities. For many portions of the coast, this would be National Geodetic Vertical Datum although some areas use mean lower low water. Report storm tide in feet above the datum, and storm surge in feet above the normal, predicted (astronomical) tide level. Identify location and date/time (UTC) of occurrence where possible.
- e. Extent of beach erosion: As appropriate.
- f. Flooding and/or flash flooding in CWA: Report to include date/times (UTC) and locations of occurrence.
- g. Tornadoes in CWA: Report (times and locations).
- h. Storm effects: Such as deaths, injuries, dollar damages, number of people evacuated, etc., within an office's CWA.

6.5 Information for Service Assessments. WFOs will forward a copy of media reports, especially newspaper clippings (online and printed) representative of the event and its impacts. Send reports to the appropriate regional headquarters and TPC within 7 days following the issuance of the last product concerning the storm. Reports do not have to include all interviews or radio or television spots concerning the landfall event in each local office's CWA.

6.6 Local Storm Reports (LSR). WFOs will prepare these reports in accordance with LSR instructions.

7. Correction Procedures. If a correction needs to be issued for any tropical cyclone product, list the reason for the correction immediately after the header of the corrected product.

Appendix A

EXAMPLES OF TROPICAL WEATHER PRODUCTS

Example: Tropical Weather Outlook

ABNT20 KNHC 100855
TWOAT
TROPICAL WEATHER OUTLOOK
NATIONAL WEATHER SERVICE MIAMI FL
530 AM EDT THU AUG 10 2000

FOR THE NORTH ATLANTIC...CARIBBEAN SEA AND THE GULF OF MEXICO...

THE NATIONAL HURRICANE CENTER IS ISSUING ADVISORIES ON HURRICANE ALBERTO AND ON TROPICAL DEPRESSION FOUR.

CLOUDINESS AND SHOWERS ASSOCIATED WITH A TROPICAL WAVE ABOUT A COUPLE OF HUNDRED MILES SOUTH OF THE CAPE VERDE ISLANDS ARE MOVING WESTWARD. THERE IS SOME POTENTIAL FOR DEVELOPMENT DURING THE NEXT FEW DAYS.

A LARGE AREA OF CLOUDINESS AND THUNDERSTORMS ASSOCIATED WITH A TROPICAL WAVE HAS DEVELOPED OVER THE NORTHWESTERN CARIBBEAN SEA. THIS ACTIVITY IS EXPECTED TO SPREAD WEST-NORTHWESTWARD OVER PORTIONS OF CENTRAL AMERICA AND YUCATAN DURING THE NEXT DAY OR TWO. THERE ARE NO SIGNS OF TROPICAL CYCLONE FORMATION AT THIS TIME.

CLOUDINESS AND THUNDERSTORMS BETWEEN THE BAHAMAS AND BERMUDA ARE DECREASING AT THIS TIME. HOWEVER...SOME REDEVELOPMENT OF THE SHOWER ACTIVITY IS POSSIBLE DURING THE NEXT 24 HOURS.

ELSEWHERE...TROPICAL STORM FORMATION IS NOT EXPECTED THROUGH FRIDAY.

FORECAST/ADVISORIES ON TROPICAL DEPRESSION FOUR ARE ISSUED UNDER AWIPS HEADER TCMAT4 AND WMO HEADER WTNT24 KNHC. PUBLIC ADVISORIES ARE ISSUED UNDER AWIPS HEADER TCPAT4 AND WMO HEADER WTNT34 KNHC.

Examples: Mass News Disseminator Headers

TROPICAL DEPRESSION ONE-E ADVISORY NUMBER 1
TROPICAL STORM ALEX ADVISORY NUMBER 3
HURRICANE ALEX ADVISORY NUMBER 4
SUBTROPICAL STORM THREE ADVISORY NUMBER 1

Example: Tropical Storm Public Advisory

WTNT33 KNHC 081500
TCPAT3
BULLETIN
TROPICAL STORM FLOYD ADVISORY NUMBER 4
NATIONAL WEATHER SERVICE MIAMI FL
11 AM AST WED SEP 08 1999

...FLOYD MOVING WEST-NORTHWESTWARD IN THE TROPICAL ATLANTIC...

AT 11 AM AST...1500Z...THE CENTER OF TROPICAL STORM FLOYD WAS
LOCATED NEAR LATITUDE 15.8 NORTH...LONGITUDE 50.0 WEST OR ABOUT 755
MILES...1210 KM...EAST OF THE LEEWARD ISLANDS.

FLOYD IS MOVING TOWARD THE WEST NORTHWEST NEAR 15 MPH ...24
KM/HR...AND THIS MOTION IS EXPECTED TO CONTINUE THROUGH TONIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 45 MPH... 75 KM/HR...WITH HIGHER
GUSTS...AND SOME SLOW STRENGTHENING IS EXPECTED DURING THE NEXT
24 HOURS.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 85 MILES...140 KM
FROM THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 1003 MB...29.62 INCHES.

REPEATING THE 11 AM AST POSITION...15.8 N... 50.0 W. MOVEMENT
TOWARD...WEST NORTHWEST NEAR 15 MPH. MAXIMUM SUSTAINED WINDS...
45 MPH. MINIMUM CENTRAL PRESSURE...1003 MB.

THE NEXT ADVISORY WILL BE ISSUED BY THE NATIONAL HURRICANE CENTER
AT 5 PM AST.

FORECASTER FRANKLIN

Example: Hurricane/Typhoon Public Advisory

TCPAT3
WTNT33 KNHC 151500
BULLETIN
HURRICANE FLOYD ADVISORY NUMBER 32
NATIONAL WEATHER SERVICE MIAMI FL
11 AM EDT WED SEP 15 1999

...FRINGES OF HURRICANE CONTINUE TO IMPACT COAST OF NORTH FLORIDA AND GEORGIA...BUT FLOYD IS HEADING FOR THE CAROLINAS...

AT 11 AM EDT...A TROPICAL STORM WATCH IS EXTENDED NORTHWARD AND IS NOW IN EFFECT FROM NORTH OF CHINCOTEAGUE VIRGINIA TO SANDYHOOK NEW JERSEY...INCLUDING DELAWARE BAY.

A HURRICANE WARNING REMAINS IN EFFECT FROM TITUSVILLE FLORIDA TO THE NORTH CAROLINA/VIRGINIA BORDER...INCLUDING PAMLICO AND ALBEMARLE SOUNDS. AT 11 AM EDT...HURRICANE WARNINGS ARE DISCONTINUED SOUTH OF TITUSVILLE.

A HURRICANE WATCH CONTINUES IN EFFECT FROM THE NORTH CAROLINA/VIRGINIA BORDER TO CHINCOTEAGUE VIRGINIA...INCLUDING CHESAPEAKE BAY SOUTH OF SMITH POINT.

INTERESTS ALONG THE FLORIDA EAST COAST SOUTH OF TITUSVILLE SHOULD EXERCISE CAUTION UNTIL WINDS AND SEAS SUBSIDE.

AT 11 AM EDT...1500Z...THE CENTER OF HURRICANE FLOYD WAS LOCATED NEAR LATITUDE 29.9 NORTH...LONGITUDE 79.0 WEST OR ABOUT 165 MILES EAST-SOUTHEAST OF JACKSONVILLE FLORIDA. THIS POSITION IS ALSO ABOUT 260 MILES SOUTH OF MYRTLE BEACH SOUTH CAROLINA.

FLOYD IS MOVING TOWARD THE NORTH NORTHWEST NEAR 14 MPH AND A GRADUAL TURN TOWARD THE NORTH IS EXPECTED TODAY.

MAXIMUM SUSTAINED WINDS ARE NEAR 125 MPH...205 KM/HR...WITH HIGHER GUSTS. LITTLE CHANGE IN STRENGTH IS FORECAST BEFORE LANDFALL...WHICH IS EXPECTED TONIGHT NEAR THE BORDER OF SOUTH AND

NORTH CAROLINA. ALL PREPARATIONS SHOULD BE RUSHED TO COMPLETION.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 140 MILES...220 KM...FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 230 MILES...370 KM.

THE LATEST MINIMUM CENTRAL PRESSURE REPORTED BY U.S. AIR FORCE HURRICANE HUNTER AIRCRAFT IS 943 MB...27.85 INCHES.

STORM SURGE FLOODING OF 10 TO 13 FEET ABOVE NORMAL TIDE LEVELS...ALONG WITH LARGE AND DANGEROUS BATTERING WAVES...ARE EXPECTED NEAR AND TO THE EAST OF WHERE THE CENTER CROSSES THE COAST. HEAVY SURF ADVISORIES ARE IN EFFECT FOR THE U.S. EAST COAST NORTHWARD TO CHATHAM MASSACHUSETTS. REFER TO STATEMENTS ISSUED BY LOCAL NATIONAL WEATHER SERVICE OFFICES FOR ADDITIONAL INFORMATION.

RAINFALL TOTALS OF 5 TO 10 INCHES ARE EXPECTED ALONG THE PATH OF THE HURRICANE.

ISOLATED TORNADOES ARE POSSIBLE OVER THE COASTAL COUNTIES OF SOUTH AND NORTH CAROLINA.

REPEATING THE 11 AM EDT POSITION...29.9 N... 79.0 W. MOVEMENT TOWARD...NORTH NORTHWEST NEAR 14 MPH. MAXIMUM SUSTAINED WINDS...125MPH. MINIMUM CENTRAL PRESSURE... 943 MB.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL WEATHER OFFICE.

INTERMEDIATE ADVISORIES WILL BE ISSUED BY THE NATIONAL HURRICANE CENTER AT 1 PM EDT AND 3 PM EDT FOLLOWED BY THE NEXT COMPLETE ADVISORY AT 5 PM EDT.

FORECASTER LAWRENCE

Example: Intermediate Public Advisory

WTNT33 KNHC 151900

TCPAT3

BULLETIN

HURRICANE FLOYD INTERMEDIATE ADVISORY NUMBER 32B

NATIONAL WEATHER SERVICE MIAMI FL
3 PM EDT WED SEP 15 1999

...FRINGES OF HURRICANE CONTINUE TO IMPACT COAST OF NORTH FLORIDA AND GEORGIA...BUT FLOYD IS HEADING FOR THE CAROLINAS...

A HURRICANE WARNING REMAINS IN EFFECT FROM NORTH OF FERNANDINA BEACH FLORIDA TO THE NORTH CAROLINA/VIRGINIA BORDER...INCLUDING PAMLICO AND ALBEMARLE SOUNDS. AT 3 PM EDT...WARNINGS ARE DISCONTINUED FROM FERNANDINA BEACH SOUTHWARD. WARNINGS WILL LIKELY BE DISCONTINUED FOR PORTIONS OF GEORGIA LATER TODAY.

A HURRICANE WATCH REMAINS IN EFFECT FROM THE NORTH CAROLINA/VIRGINIA BORDER TO CHINCOTEAGUE VIRGINIA...INCLUDING CHESAPEAKE BAY SOUTH OF SMITH POINT.

A TROPICAL STORM WATCH REMAINS IN EFFECT FROM NORTH OF CHINCOTEAGUE VIRGINIA TO MONTAUK POINT LONG ISLAND...INCLUDING DELAWARE BAY AND LONG ISLAND SOUND.

INTERESTS ALONG THE FLORIDA EAST COAST SHOULD EXERCISE CAUTION UNTIL WINDS AND SEAS SUBSIDE.

AT 3 PM EDT...1900Z...THE CENTER OF HURRICANE FLOYD WAS LOCATED NEAR LATITUDE 30.8 NORTH...LONGITUDE 79.1 WEST OR ABOUT 200 MILES SOUTH OF MYRTLE BEACH SOUTH CAROLINA.

FLOYD IS MOVING ALMOST DUE NORTHWARD AT 15 MPH AND THIS MOTION IS EXPECTED TO CONTINUE TODAY WITH A GRADUAL TURN TOWARD THE NORTH-NORTHEAST ON THURSDAY.

MAXIMUM SUSTAINED WINDS HAVE DECREASED TO NEAR 120 MPH...WITH HIGHER GUSTS. ALTHOUGH THE HURRICANE HAS BEEN SLOWLY WEAKENING...IT IS OVER THE WARM WATERS OF THE GULF STREAM COULD MAINTAIN ITS PRESENT STRENGTH UNTIL LANDFALL TONIGHT. ALL PREPARATIONS IN THE WARNING AREA SHOULD BE RUSHED TO COMPLETION.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 140 MILES...220 KM... FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 230 MILES...370 KM.

THE LATEST MINIMUM CENTRAL PRESSURE REPORTED BY U.S. AIR FORCE HURRICANE HUNTER AIRCRAFT IS 947 MB...27.96 INCHES.

STORM SURGE FLOODING OF 10 TO 13 FEET ABOVE NORMAL TIDE LEVELS...ALONG WITH LARGE AND DANGEROUS BATTERING WAVES...ARE EXPECTED NEAR AND TO THE EAST OF WHERE THE CENTER CROSSES THE COAST.

HEAVY SURF ADVISORIES ARE IN EFFECT FOR THE U.S. EAST COAST NORTHWARD TO CHATHAM MASSACHUSETTS. REFER TO STATEMENTS ISSUED BY LOCAL NATIONAL WEATHER SERVICE OFFICES FOR ADDITIONAL INFORMATION.

RAINFALL TOTALS OF 5 TO 10 INCHES ARE EXPECTED ALONG THE PATH OF THE HURRICANE.

ISOLATED TORNADOES ARE POSSIBLE OVER THE COASTAL COUNTIES OF SOUTH AND NORTH CAROLINA.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL WEATHER OFFICE.

REPEATING THE 3 PM EDT POSITION...30.8 N... 79.1 W. MOVEMENT TOWARD...NORTH NEAR 15 MPH. MAXIMUM SUSTAINED WINDS...120 MPH. MINIMUM CENTRAL PRESSURE... 947 MB.

THE NEXT ADVISORY WILL BE ISSUED BY THE NATIONAL HURRICANE CENTER AT 5 PM EDT.

FORECASTER LAWRENCE

Example: Special Public Advisory

WTNT33 KNHC 241309
TCPAT3
BULLETIN
HURRICANE ANDREW SPECIAL ADVISORY NUMBER 25
NATIONAL WEATHER SERVICE MIAMI FL
900 AM EDT MON AUG 24 1992

...HURRICANE ANDREW MOVING INTO THE GULF OF MEXICO...

HURRICANE WARNINGS REMAIN POSTED FOR THE FLORIDA WEST COAST SOUTH OF VENICE TO FLAMINGO AND FOR LAKE OKEECHOBEE. AT 9 AM EDT A HURRICANE WATCH WILL GO INTO EFFECT FOR THE NORTHERN GULF

COAST FROM MOBILE ALABAMA TO SABINE PASS TEXAS. ALL OTHER POSTED WATCHES AND WARNINGS ARE DISCONTINUED.

WIND GUSTS TO HURRICANE FORCE CONTINUE TO OCCUR ALONG THE SOUTHEAST FLORIDA COAST BUT WILL GRADUALLY DIMINISH DURING THE DAY. SMALL CRAFT ADVISORIES REMAIN IN EFFECT. RESIDENTS IN THESE AREAS SHOULD MONITOR LOCAL NWS OFFICES FOR THE LATEST FORECASTS AND CONDITIONS IN THEIR AREA.

AT 9 AM EDT THE CENTER OF HURRICANE ANDREW WAS LOCATED NEAR LATITUDE 25.6 NORTH AND LONGITUDE 81.8 WEST OR APPROXIMATELY 45 MILES SOUTH OF NAPLES FLORIDA.

HURRICANE ANDREW IS MOVING TOWARD THE WEST AT 18 MPH. THIS MOTION IS EXPECTED TO CONTINUE THIS MORNING WITH A GRADUAL TURN TO THE WEST NORTHWEST LATER TODAY.

MAXIMUM SUSTAINED WINDS ARE NEAR 140 MPH. LITTLE CHANGE IN STRENGTH IS LIKELY DURING THE NEXT 24 HOURS.

HURRICANE FORCE WINDS EXTEND OUTWARD TO 30 MILES...50 KM FROM THE CENTER WITH TROPICAL STORM FORCE WINDS EXTENDING OUTWARD TO 140 MILES. ESTIMATED MINIMUM CENTRAL PRESSURE IS 945 MB...27.91 INCHES.

STORM SURGES OF 5 TO 8 FEET ARE POSSIBLE ON THE FLORIDA WEST COAST NEAR AND TO THE SOUTH OF THE CENTER FOLLOWING PASSAGE OF THE HURRICANE. ALONG THE SOUTHEAST COAST OF FLORIDA STORM SURGE TIDES ARE DECREASING. PRELIMINARY REPORTS FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT INDICATE A STORM SURGE OF 8 FEET ABOVE NORMAL WAS RECORDED IN BISCAVNE BAY NEAR HOMESTEAD FLORIDA.

RAINFALL AMOUNTS OF 5 TO 8 INCHES AND ISOLATED TORNADOES ARE POSSIBLE ACROSS SOUTHERN AND CENTRAL FLORIDA TODAY.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL WEATHER OFFICE.

REPEATING THE 9 AM EDT POSITION...LATITUDE 25.6 NORTH AND LONGITUDE 81.8 WEST AND MOVING TOWARD THE WEST AT 18 MPH. MAXIMUM SUSTAINED WINDS NEAR 140 MPH. MINIMUM CENTRAL PRESSURE OF 945 MB...27.91 INCHES.

THE NEXT SCHEDULED ADVISORY WILL BE ISSUED BY THE NATIONAL
HURRICANE CENTER AT 11 AM EDT MON.

Example: Public Advisory Correction

WTNT31 KNHC 240855
TCPAT3

HURRICANE ANDREW ADVISORY NUMBER 25...CORRECTED
NATIONAL WEATHER SERVICE MIAMI FL
500 AM EDT MON AUG 24 1992

...CORRECTION FOR CENTRAL PRESSURE...

BODY OF TEXT

Example: Hurricane Forecast/Advisory

NOTE: As part of the header, a code string is appended at the end of the line "NATIONAL
WEATHER SERVICE MIAMI FL"

Format: NATIONAL WEATHER SERVICE MIAMI FL BSNOYR
where: (BS) is the basin (AL, EP or CP)
where: (NO) is the tropical cyclone number (01, 02, 03,...99)
where: (YR) is the last two digits of the year.

WTNT23 KNHC 211042
TCMAT2
TROPICAL STORM DEBBY FORECAST/ADVISORY NUMBER 8
NATIONAL WEATHER SERVICE MIAMI FL AL0700
1500Z MON AUG 21 2000

AT 11 AM AST...1500 UTC...THE GOVERNMENTS OF FRANCE...ANTIGUA...AND
THE NETHERLANDS ANTILLES HAVE ISSUED HURRICANE WARNINGS FOR
THEIR RESPECTIVE ISLANDS EXTENDING FROM GUADELOUPE NORTH AND
NORTHWESTWARD THROUGH THE BRITISH VIRGIN ISLANDS. ALSO AT 11 AM
AST...1500 UTC...A HURRICANE WARNING IS IN EFFECT FOR THE U.S. VIRGIN
ISLANDS...AND THE GOVERNMENT OF BARBADOS HAS ISSUED A TROPICAL
STORM WARNING AND A HURRICANE WATCH FOR DOMINICA. A HURRICANE
WATCH REMAINS IN EFFECT FOR PUERTO RICO...AND MAY BE UPGRADED TO
A HURRICANE WARNING LATER TODAY.

TROPICAL STORM CENTER LOCATED NEAR 15.7N 57.3W AT 21/1500Z
POSITION ACCURATE WITHIN 45 NM

PRESENT MOVEMENT TOWARD THE WEST OR 275 DEGREES AT 19 KT

ESTIMATED MINIMUM CENTRAL PRESSURE 1008 MB

MAX SUSTAINED WINDS 60 KT WITH GUSTS TO 80 KT.

50 KT..... 50NE 40SE 25SW 50NW.

34 KT.....125NE 75SE 40SW 125NW.

12 FT SEAS..250NE 100SE 75SW 150NW.

WINDS AND SEAS VARY GREATLY IN EACH QUADRANT. RADII IN NAUTICAL MILES ARE THE LARGEST RADII EXPECTED ANYWHERE IN THAT QUADRANT.

REPEAT...CENTER LOCATED NEAR 15.7N 57.3W AT 21/1500Z

AT 21/1200Z CENTER WAS LOCATED NEAR 15.6N 56.4W

FORECAST VALID 22/0000Z 16.2N 60.2W

MAX WIND 65 KT...GUSTS 80 KT.

64 KT... 20NE 10SE 10SW 10NW.

50 KT... 50NE 40SE 25SW 50NW.

34 KT...125NE 75SE 40SW 125NW.

FORECAST VALID 22/1200Z 17.0N 63.8W

MAX WIND 75 KT...GUSTS 90 KT.

64 KT... 20NE 10SE 10SW 20NW.

50 KT... 60NE 50SE 35SW 60NW.

34 KT...125NE 80SE 50SW 125NW.

FORECAST VALID 23/0000Z 18.0N 67.2W

MAX WIND 75 KT...GUSTS 90 KT.

64 KT... 20NE 20SE 10SW 20NW.

50 KT... 50NE 50SE 40SW 60NW.

34 KT...130NE 90SE 60SW 130NW.

REQUEST FOR 3 HOURLY SHIP REPORTS WITHIN 300 MILES OF 15.7N 57.3W

EXTENDED OUTLOOK...USE FOR GUIDANCE ONLY...ERRORS MAY BE LARGE

OUTLOOK VALID 23/1200Z 19.0N 70.0W

MAX WIND 70 KT...GUSTS 85 KT.

50 KT... 60NE 45SE 45SW 60NW.

34 KT...100NE 100SE 100SW 100NW.

OUTLOOK VALID 24/1200Z 21.0N 75.0W
MAX WIND 85 KT...GUSTS 105 KT.
50 KT... 70NE 70SE 50SW 50NW.
34 KT...130NE 130SE 150SW 150NW.

NEXT ADVISORY AT 21/2100Z

FORECASTER STEWART

Example: Tropical Cyclone Update from - CPHC

WTOA60 PHFO 222000
TCUCP
HURRICANE INIKI TROPICAL CYCLONE UPDATE
NATIONAL WEATHER SERVICE HONOLULU HI
100 PM PST SAT AUG 22 1992

...RECONNAISSANCE AIRCRAFT INDICATE WINDS IN INIKI HAVE REACHED
HURRICANE STRENGTH...

SHORTLY AFTER 1 PM PST...AIR FORCE RESERVE RECONNAISSANCE AIRCRAFT
INDICATED MAXIMUM SUSTAINED WINDS IN TROPICAL STORM INIKI HAD
INCREASED TO HURRICANE FORCE. DETAILS WILL FOLLOW IN A SPECIAL
HURRICANE ADVISORY AT 2 PM PST.

Example: Tropical Cyclone Position Estimate

WTNT51 KNHC 190755
TCEAT
HURRICANE HUGO...POSITION ESTIMATE
NATIONAL WEATHER SERVICE MIAMI FL
300 AM AST TUE SEP 19 1989

AT 3 AM AST THE CENTER OF HURRICANE HUGO WAS ESTIMATED NEAR
LATITUDE 20.7 NORTH AND LONGITUDE 67.3 WEST. THIS IS APPROXIMATELY
155 MILES NORTH NORTHWEST OF SAN JUAN PUERTO RICO AND 220 MILES
EAST SOUTHEAST OF GRAND TURK ISLAND OF THE BAHAMAS.

LAWRENCE

Example: Tropical Cyclone Summary - Fixes

TXPN40 PHFO 120017
TCSCP

CENTRAL PACIFIC TROPICAL CYCLONE SUMMARY

TROPICAL DISTURBANCE LOCATED NEAR 13.9N 152.2W AT 11/2330 UTC BASED ON GOES VIS DATA AND ANIMATION. POSITION ACCURATE WITHIN 45 NM. ESTIMATED MAXIMUM 1 MINUTE WIND SPEED 25 KT. MOVEMENT TOWARD 295 DEGREES AT 14 KT OVER THE PAST 6 HOURS.

T1.5/1.5/D/17.5 HOURS

REMARKS: LOW LEVEL CIRCULATION CENTER (LLCC) IS MORE THAN THREE FOURTHS OF A DEGREE FROM DENSE OVERCAST...YIELDING A DATA T OF 1.5. MET AGREES. SYSTEM NOT IDENTIFIABLE USING PATTERN T. MAIN CONVECTION IS 85 NM TO THE EAST/SOUTHEAST OF THE LLCC AND HAS WEAKENED CONSIDERABLY OVER THE PAST SIX HOURS.

Example: Strike Probabilities of Tropical Cyclone Conditions

WTNT71 KNHC 150900
SPFAT3
HURRICANE FLOYD PROBABILITIES NUMBER 31
NATIONAL WEATHER SERVICE MIAMI FL
5 AM EDT WED SEP 15 1999

PROBABILITIES FOR GUIDANCE IN HURRICANE PROTECTION PLANNING BY GOVERNMENT AND DISASTER OFFICIALS

AT 5 AM EDT...0900Z...THE CENTER OF FLOYD WAS LOCATED NEAR LATITUDE 28.8 NORTH...LONGITUDE 78.8 WEST

CHANCES OF CENTER OF THE HURRICANE PASSING WITHIN 65 NAUTICAL MILES OF LISTED LOCATIONS THROUGH 2AM EDT SAT SEP 18 1999

LOCATION	A	B	C	D	E	LOCATION	A	B	C	D	E
33.2N 79.1W	38	2	X	X	40	PROVIDENCE RI	X	X	3	13	16
36.3N 78.0W	X	26	6	X	32	NANTUCKET MA	X	X	2	12	14

40.0N 75.0W	X X 18 3 21	HYANNIS MA	X X 2 12 14
COCOA BEACH FL	5 X X 1 6	BOSTON MA	X X 2 13 15
DAYTONA BEACH FL	20 X X X 20	PORTLAND ME	X X 1 14 15
JACKSONVILLE FL	25 X X X 25	BAR HARBOR ME	X X X 12 12
SAVANNAH GA	36 1 X X 37	EASTPORT ME	X X X 11 11
CHARLESTON SC	41 1 X X 42	ST JOHN NB	X X X 10 10
MYRTLE BEACH SC	30 7 X X 37	MONCTON NB	X X X 9 9
WILMINGTON NC	15 17 1 X 33	YARMOUTH NS	X X X 9 9
MOREHEAD CITY NC	5 19 3 1 28	HALIFAX NS	X X X 7 7
CAPE HATTERAS NC	1 13 8 X 22	SABLE ISLAND NS	X X X 2 2
NORFOLK VA	X 11 15 X 26	SYDNEY NS	X X X 3 3
OCEAN CITY MD	X 2 19 1 22	EDDY POINT NS	X X X 4 4
ATLANTIC CITY NJ	X X 17 4 21	PTX BASQUES NFLD	X X X 3 3
NEW YORK CITY NY	X X 12 7 19	BURGEO NFLD	X X X 2 2
MONTAUK POINT NY	X X 5 11 16		

COLUMN DEFINITION PROBABILITIES IN PERCENT

A IS PROBABILITY FROM NOW TO 2AM THU

FOLLOWING ARE ADDITIONAL PROBABILITIES

B FROM 2AM THU TO 2PM THU

C FROM 2PM THU TO 2AM FRI

D FROM 2AM FRI TO 2AM SAT

E IS TOTAL PROBABILITY FROM NOW TO 2AM SAT

X MEANS LESS THAN ONE PERCENT

FORECASTER GUINEY

NOTE: Above probability table is provided as an example depicting the format. The probabilities included do not necessarily agree with the predicted forecast positions.

Example: Subtropical Cyclone Public Advisory

WTNT31 KNHC 040255

TCPAT1

BULLETIN

SUBTROPICAL DEPRESSION ONE ADVISORY NUMBER 2

NATIONAL WEATHER SERVICE MIAMI FL

11 PM EDT WED OCT 04 2000

...SUBTROPICAL DEPRESSION TURNS EAST-NORTHEAST WITH LITTLE CHANGE
IN STRENGTH...

AT 11 PM EDT...0300Z...THE CENTER OF THE SUBTROPICAL DEPRESSION WAS LOCATED NEAR LATITUDE 29.8 NORTH...LONGITUDE 79.5 WEST OR ABOUT 105 MILES...165 KM...EAST-NORTHEAST OF DAYTONA BEACH FLORIDA.

THE DEPRESSION IS MOVING TOWARD THE EAST-NORTHEAST NEAR 9 MPH ...15 KM/HR...AND THIS MOTION IS EXPECTED TO CONTINUE FOR THE NEXT 24 HOURS.

MAXIMUM SUSTAINED WINDS ARE NEAR 35 MPH... 55 KM/HR...WITH HIGHER GUSTS....MAINLY WELL TO THE EAST AND SOUTHEAST OF THE CENTER. SOME STRENGTHENING IS FORECAST DURING THE NEXT 24 HOURS.

THE LATEST MINIMUM CENTRAL PRESSURE REPORTED BY A NOAA HURRICANE HUNTER AIRCRAFT IS 1010 MB...29.83 INCHES.

REPEATING THE 11 PM EDT POSITION...29.8 N... 79.5 W. MOVEMENT TOWARD...EAST-NORTHEAST NEAR 9 MPH. MAXIMUM SUSTAINED WINDS... 35 MPH. MINIMUM CENTRAL PRESSURE...1010 MB.

THE NEXT ADVISORY WILL BE ISSUED BY THE NATIONAL HURRICANE CENTER AT 5 AM EDT...THURSDAY.

FORECASTER BEVEN

Example: Public Advisory (previously Storm Summary)

WTNT31 KWNH 291658

TCPAT1

PUBLIC ADVISORY NUMBER 58 FOR DEPRESSION GEORGES

NATIONAL CENTERS FOR ENVIRONMENTAL PREDICTION

HYDROMETEOROLOGICAL PREDICTION CENTER...NWS...CAMP SPRINGS MD

1200 PM CDT TUE SEP 29 1998

AT 1000 AM CDT THE CENTER OF CIRCULATION ASSOCIATED WITH "GEORGES" WAS LOCATED NEAR 31.1N 87.9W...OR ROUGHLY 35 MILES NORTH NORTHEAST OF MOBILE ALABAMA. MAXIMUM SUSTAINED WINDS WERE JUST OVER 30 MPH WITH OCCASIONAL GUSTS OVER 40 MPH..AND GRADUAL WEAKENING IS EXPECTED TO CONTINUE DURING THE NEXT 24 HOURS AS IT SLOWLY MOVES TOWARD THE NORTHEAST ACROSS SOUTH AND CENTRAL ALABAMA.

AT THE PRESENT TIME...RADAR AND SATELLITE IMAGERY IS STILL SHOWING A WELL-DEFINED CIRCULATION WITH "GEORGES." LARGE AMOUNTS OF MOISTURE FROM THE GULF OF MEXICO ARE STREAMING NORTHWARD AROUND THE EASTERN SIDE OF THE SYSTEM. THIS MOISTURE HAS LED TO AN EXTENSIVE AREA OF HEAVY RAIN WITH EMBEDDED THUNDERSTORMS AS FAR NORTH AS NORTH GEORGIA...WHERE THE MOISTURE IS INTERACTING WITH A COLD FRONT MOVING THROUGH THE EASTERN STATES. MEANWHILE...DRY AIR BEING WRAPPED AROUND WEST SIDE OF THE CIRCULATION HAS BROUGHT AN END TO THE HEAVY RAIN OVER SOUTH AND EAST MISSISSIPPI...WHERE ONLY LIGHT SHOWERS REMAIN.

THE BIG STORY NOW WITH "GEORGES" WILL CONTINUE TO BE THE EXTREMELY HEAVY RAINFALL ALONG WITH THE THREAT OF TORNADOES ALONG ITS EAST EDGE. BANDS OF TORRENTIAL RAIN ARE CONTINUING TO MOVE RAPIDLY ACROSS THE WEST FLORIDA PANHANDLE INTO ADJACENT SOUTH ALABAMA. THIS WILL ADD TO THE VERY HIGH RAINFALL TOTALS THAT HAVE OCCURRED SINCE THE STORM MADE LANDFALL OVER SOUTH MISSISSIPPI EARLY MONDAY MORNING.

RAINFALL TOTALS OVER THE PERIOD FROM SATURDAY THROUGH MONDAY INCLUDE:

...ALABAMA...

BAY MINNETTE (BALDWIN CO)	14.55 INCHES
ALABAMA PORT (MOBILE CO)	13.66 INCHES
MOBILE AIRPORT	12.20 INCHES
AXIS (MOBILE CO)	10.00 INCHES
CHATOM (WASHINGTON CO)	9.80 INCHES
SEMINOLE	9.43 INCHES

...FLORIDA...

MUNSON (SANTA ROSA CO)	25.06 INCHES
PENSACOLA AIRPORT (ESCAMBIA CO)	10.08 INCHES
NICEVILLE (OKALOOSA CO)	10.08 INCHES

...MISSISSIPPI...

LEAKESVILLE (GREENE CO)	8.29 INCHES
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SATELLITE AND RADAR ESTIMATES INDICATE SOME LOCATIONS IN SOUTHEAST MISSISSIPPI...SOUTHWEST ALABAMA...AND WEST FLORIDA

PANHANDLE HAVE RECEIVED OVER 30 INCHES OF RAIN SINCE EARLY SUNDAY MORNING.

AS A RESULT OF THE EXCESSIVE RAINFALL...THERE ARE FLASH FLOOD WATCHES IN EFFECT TODAY AND TONIGHT FOR LARGE PORTIONS OF SOUTH AND CENTRAL ALABAMA...THE WEST FLORIDA PANHANDLE...AND WEST AND SOUTHWEST GEORGIA. IN ADDITION...SINCE DECAYING TROPICAL SYSTEMS FREQUENTLY PRODUCE TORNADOES AFTER MAKING LANDFALL...A TORNADO WATCH IS IN EFFECT UNTIL 700 PM CDT FOR THE FLORIDA PANHANDLE...SOUTHWEST AND WEST CENTRAL GEORGIA...SOUTHEAST ALABAMA...AND THE NEARBY COASTAL WATERS.

THE NEXT STORM SUMMARY WILL BE ISSUED BY HPC AT 600 PM CDT.

MAUSSER/FORECAST OPERATIONS BRANCH

Example: Hurricane Local Statement

WTUS84 KBRO 141603
HLSBRO
TXZ251-254>257-141900-
HURRICANE LOCAL STATEMENT
NATIONAL WEATHER SERVICE BROWNSVILLE TX
1100 AM CDT MON AUG 14 2000

...DEPRESSION STRENGTHENS TO TROPICAL STORM BERYL...
...HURRICANE WARNINGS ARE POSTED FOR THE LOWER TEXAS COAST...

THIS STATEMENT DETAILS SPECIFIC PREPAREDNESS AND SAFETY ACTIONS TO BE TAKEN IN THE DEEP SOUTH TEXAS COUNTIES OF CAMERON...WILLACY...AND KENEDY.

...FLOOD INFORMATION...
BERYL HAS THE POTENTIAL OF PRODUCING TORRENTIAL RAINFALL THAT COULD CAUSE FLOODING ACROSS DEEP SOUTH TEXAS AS IT MOVES INLAND BECAUSE OF IT'S VERY SLOW SPEED. IT IS FORECAST TO MOVE AT ONLY 5 MPH. AT THIS TIME...ABOUT 5 TO 10 INCHES OF RAINFALL IS EXPECTED. HOWEVER... RAINFALL AMOUNTS COULD BE EVEN HIGHER. A FLASH FLOOD WATCH WILL LIKELY BE ISSUED THIS AFTERNOON TO BE IN EFFECT TONIGHT AND TUESDAY FOR ALL OF DEEP SOUTH TEXAS.

REMEMBER THAT IN THE PAST 30 YEARS INLAND FLOODING FROM TROPICAL CYCLONES HAVE KILLED MORE PEOPLE EACH YEAR THAN ANY OTHER TROPICAL WEATHER PHENOMENA. PLEASE...IF YOU ENCOUNTER A FLOODED ROADWAY...TURN AROUND AND FIND AN ALTERNATE ROUTE.

...STORM SURGE...

HURRICANE TIDES OF 1 TO 3 FEET ABOVE NORMAL WILL FLOOD BEACHES AND LOW LYING AREAS OF SOUTH PADRE ISLAND BEGINNING EARLY TUESDAY MORNING.

A STORM SURGE OF 2 TO 5 FEET CAN BE EXPECTED NEAR AND TO THE NORTH OF WHERE THE HURRICANE MAKES LANDFALL. PERSONS LIVING IN TRAILERS OR MOBILE HOMES IN WILLACY...CAMERON...AND KENEDY COUNTIES SHOULD CONSIDER LOCKING UP THEIR HOMES...TURNING OFF UTILITIES AND LEAVING FOR INLAND AREAS UNTIL THE STORM HAS PASSED IF LOCAL OFFICIALS CALL FOR EVACUATION.

ABOVE NORMAL TIDES AND HIGH SURF WILL CAUSE CONSIDERABLE BEACH EROSION. STRONG RIP CURRENTS ARE EXPECTED...AND GOING INTO THE GULF WATERS NOW COULD RESULT IN DROWNING OR BEING SWEEPED INTO THE OPEN WATERS. SMALL CRAFT SHOULD BE IN DRY STORAGE...AND SHRIMPING AND OTHER COMMERCIAL VESSELS SHOULD BE IN TRADITIONAL SAFE HARBORS. CRAFT LEFT IN THE WATER...ESPECIALLY THE SHRIMP BASIN WHICH IS EXPOSED TO STRONG WINDS...SHOULD BE WELL SECURED TO MINIMIZE DAMAGE FROM ROLLING FORCES CAUSED BY HIGH WINDS AND WAVES. WITH THE EXPECTATION OF HIGH WINDS BY TUESDAY...ATTEMPTS TO SECURE BOATS AND GENERAL PREPAREDNESS SHOULD BEGIN NOW.

...WIND INFORMATION...

AT 1000 AM THE WINDS WERE 50 MPH WITH HIGHER GUSTS. WINDS ARE EXPECTED TO INCREASE STEADILY TONIGHT ALONG THE LOWER TEXAS COAST...AND COULD REACH HURRICANE FORCE ON TUESDAY IF BERYL CONTINUES TO STRENGTHEN. IF THE EYE OF A HURRICANE PASSES OVER THE AREA...WINDS WILL DROP SUDDENLY...POSSIBLY TO NEAR CALM...AND SKIES WILL CLEAR. DO NOT MISTAKE THIS FOR THE END OF THE STORM. THE WINDS WILL RETURN SUDDENLY...AND JUST AS STRONG...WITHIN MINUTES TO UP TO AN HOUR FROM THE OPPOSITE DIRECTION.

...TORNADOES...

TORNADOES ARE ALWAYS POSSIBLE WITH THE ADVANCE OF HURRICANE GENERATED WINDS AND THUNDERSTORMS AND RESIDENTS SHOULD BE ALERT TO THIS POSSIBILITY.

THE NEXT STATEMENT IS SCHEDULED FOR 1 PM CDT...BUT MAY BE RELEASED SOONER IF NEEDED.

STAY TUNED TO NOAA WEATHER RADIO OR LOCAL NEWS SOURCES FOR THE LATEST UPDATES ON BERYL.

(ATTENTION BROADCASTERS...THIS STATEMENT IS LONG AND YOUR LISTENERS MAY MISS IMPORTANT DETAILS IF IT IS ALWAYS READ IN IT'S ENTIRETY. PLEASE READ EXCERPTS AT FREQUENT INTERVALS THROUGH THE HOUR.)

Example: Short Term Forecast (NOWcast)

FPUS71 KMOB 192130
NOWMOB
SHORT TERM FORECAST
NATIONAL WEATHER SERVICE MOBILE AL
430 PM CDT SAT AUG 19 1995

ALZ051>064-MSZ067-075-076-078-079-192330-

.NOW...

...HURRICANE GARY WILL MOVE ACROSS BALDWIN AND MOBILE COUNTIES BY 530 PM... SUSTAINED WINDS ABOVE 80 MPH WITH HIGHER GUSTS AND TORRENTIAL RAINFALL CAN BE EXPECTED AS THE RAIN BAND MOVES ACROSS. THE RAIN BAND SHOULD WEAKEN SLIGHTLY AS IT MOVES ACROSS CLARKE...WASHINGTON...AND GEORGE COUNTIES BY 6 PM. BUT PEOPLE IN THESE COUNTIES SHOULD EXPECT WIND GUSTS TO NEAR HURRICANE FORCE AND EXTREMELY HEAVY RAINFALL.

&&

SCATTERED AREAS OF MODERATE TO HEAVY RAINFALL WILL CONTINUE ACROSS SOUTHERN ALABAMA AND MISSISSIPPI THROUGH 6 PM. BANDS OF STRONG STORMS WILL MOVE NORTHWESTWARD ACROSS THE AREA. EAST WINDS OF 30-40 MPH AND HEAVY RAIN WILL PERSIST WITH STRONGER WINDS AND HEAVIER RAINFALL NEAR THE RAIN BANDS. TEMPERATURES ACROSS THE REGION WILL REMAIN IN THE 70S.

Example: Special Weather Statement

WWUS35 KBHM 261400

SPSPNS

FLZ001>004-261600-

SPECIAL WEATHER STATEMENT

NATIONAL WEATHER SERVICE XXXXX

1000 AM EDT THU AUG 26 1999

...HURRICANE PROBABILITIES ARE INCREASING ALONG THE NORTHWEST
FLORIDA COAST...

HURRICANE XENA...NOW 350 MILES SOUTHEAST OF NEW ORLEANS...IS
MOVING SLOWLY NORTH AT 5 MILES AN HOUR. THE PROBABILITY OF XENA
STRIKING PENSACOLA HAS INCREASED TO 12 PERCENT. THE NORTHWEST
FLORIDA COAST AND THE ALABAMA COAST HAVE PROBABILITIES IN THE 10
TO 12 PERCENT RANGE WITH LOWER PROBABILITIES FOR THE REST OF THE
GULF COAST. ACCORDINGLY...THE PROBABILITIES SUGGEST THE GREATEST
ATTENTION SHOULD BE FOCUSED ON THE NORTHWEST FLORIDA AND
ALABAMA COASTS.

A HURRICANE WATCH MAY BE ISSUED LATER TODAY FOR THE NORTHWEST
COAST OF FLORIDA AND ADJACENT COUNTIES IN SOUTH ALABAMA. KEEP
TUNED TO NOAA WEATHER RADIO OR YOUR LOCAL MEDIA FOR FURTHER
INFORMATION ON XENA.

Example: Inland Hurricane Wind Warning

WWUS45 KHGX 101030

NPWHOU

URGENT - WEATHER MESSAGE

NATIONAL WEATHER SERVICE HOUSTON-GALVESTON TX

600 AM CDT FRI SEP 10 1995

...AN INLAND HURRICANE WIND WARNING IN EFFECT FOR SOUTHEAST
TEXAS...

HURRICANE FRED...LOCATED 60 MILES SOUTHEAST OF GALVESTON TX AT 6
AM CDT...IS MOVING TO THE NORTH NORTHWEST AT 10 MPH AND IS
EXPECTED TO MAKE LANDFALL AROUND NOON CDT ON THE UPPER TEXAS
COAST. FRED IS THEN FORECAST TO CONTINUE ON A NORTH NORTHWEST

COURSE MOVING ACROSS HOUSTON AND REACHING THE SAN JACINTO NATIONAL FOREST BY LATE AFTERNOON. SUSTAINED WINDS OF 100 MPH WITH GUSTS TO 120 MPH SHOULD BEGIN SWEEPING ACROSS THE UPPER TEXAS COAST BY LATE MORNING.

TXZ177>179-197>199-210>212-102200-
WALKER-SAN JACINTO-POLK-WASHINGTON-GRIMES-MONTGOMERY-
COLORADO-AUSTIN-WALLER-

...INLAND HURRICANE WIND WARNING...

WINDS ARE EXPECTED TO RAPIDLY INCREASE TO 50 TO 60 MPH BY 12 NOON AND 80 MPH WITH GUSTS TO 100 MPH BY MID AFTERNOON. 75 MPH WINDS WITH HIGHER GUSTS ARE LIKELY AS FAR INLAND AS HUNTSVILLE...NAVASOTA...AND LAKE LIVINGSTON BY LATE AFTERNOON.

BE PREPARED FOR NUMEROUS DOWNED TREES AND WIRES. DO NOT CROSS DOWNED WIRES...WHICH MAY STILL BE LIVE.

\$\$

TXZ226-227-235-213-200-102200-
WHARTON-FORT BEND-JACKSON-HARRIS-LIBERTY-

...INLAND HURRICANE WIND WARNING...

WINDS FROM WHARTON TO HOUSTON AND LIBERTY ARE EXPECTED TO INCREASE TO 50 TO 60 MPH THIS MORNING AND 90 MPH WITH GUSTS TO NEAR 110 MPH BY MIDDAY...DECREASING TO 50 TO 60 MPH LATE THIS AFTERNOON.

FLYING DEBRIS WILL POSE A MAJOR THREAT TO ALL STRUCTURES IN THE WARNED AREA...ESPECIALLY GLASS FROM HIGH-RISE BUILDINGS IN DOWNTOWN HOUSTON. PEOPLE LIVING IN MOBILE HOMES AND THOSE CONCERNED ABOUT THE ABILITY OF THEIR HOMES TO WITHSTAND HURRICANE WINDS SHOULD MOVE TO A STRONG BUILDING OR SHELTER IMMEDIATELY. BE PREPARED FOR NUMEROUS DOWNED TREES AND WIRES. TAKE SHELTER IN SMALL INTERIOR ROOMS OR REINFORCED STRUCTURES.
\$\$

Example: (Warning information in Public/Marine Forecasts) State Forecast

FPUS61 KRDU 182000
SFPNC
NCZALL-190800-

STATE FORECAST FOR NORTH CAROLINA
NATIONAL WEATHER SERVICE RALEIGH/DURHAM NC
410 PM EDT SUN AUG 18 1991

...A HURRICANE WARNING IS IN EFFECT FOR COAST AND SOUNDS...
...A TORNADO WATCH IS IN EFFECT UNTIL MIDNIGHT FOR COASTAL AREAS
INCLUDING ADJACENT COASTAL WATERS AND SOUNDS...

.TONIGHT...WINDS INCREASING TO HURRICANE FORCE OVER COASTAL AREAS
BY MIDNIGHT AS HURRICANE BOB SKIRTS THE OUTER BANKS. DANGEROUS
STORM SURGE CAUSING SERIOUS BEACH EROSION AND COASTAL
FLOODING...ESPECIALLY ON THE OUTER BANKS AROUND MIDNIGHT AT THE
TIME OF HIGHEST TIDE. TORRENTIAL RAINS AND A FEW TORNADOES
POSSIBLE NEAR THE COAST UNTIL MIDNIGHT. CONDITIONS IMPROVING
TOWARD DAYBREAK. REMAINDER OF THE STATE...CLOUDY AND WINDY WITH
SCATTERED THUNDERSTORMS EAST AND SHOWERS WEST. LOWS IN THE MID
70S.

.MONDAY...MOSTLY CLOUDY WITH DIMINISHING WINDS. SCATTERED
SHOWERS AND THUNDERSTORMS EAST. HIGHS IN THE 80S.
...REST OF TEXT NOT SHOWN....

Example: Post-Storm Report

ACUS71 KNEW 032226
PSHNEW

POST-TROPICAL CYCLONE REPORTS (previously POST-STORM REPORT)
NATIONAL WEATHER SERVICE NEW ORLEANS LA
500 PM CDT MON SEP 3 1992

A. HIGHEST WINDS...

NEW ORLEANS INTERNATIONAL AIRPORT...
1 - MINUTE 39 KNOTS FROM 150 DEGREES 0950 UTC AUG 26 1992
PEAK GUST 72 KNOTS FROM 020 DEGREES AT 0728 UTC AUG 26 1992
P92 AMOS LOCATED AT SALT POINT, ST. MARY PARISH 19.5N 91.3W
...ETC

B. LOWEST PRESSURE...

LOWEST PRESSURE NEW ORLEANS INTERNATIONAL AIRPORT - 960.1 MB
AT
0805 UTC AUG 26 1992
...ETC

C. RAINFALL...

NEW ORLEANS INTERNATIONAL AIRPORT
STORM TOTAL 5.70 IN. AUG 25-26 1992
1 HOUR TOTAL 0.89 IN. 0800-0900 UTC 26 AUG 1992
...ETC

D. STORM TIDES...

MARINA 4.28 2100 UTC AUG 26 1992
N END OF CAUSEWAY 4.94 1100 UTC AUG 26 1992
...ETC

E. BEACH EROSION...

LEVEL OF EROSION PRESENTLY UNKNOWN
...ETC

F. FLOODING...

STORM TIDE FLOODING TO THE ENTIRE LOUISIANA COAST FROM LAKE
BORGNE WEST TO VERMILION BAY...ETC

G. TORNADOES...

F3 TORNADO FROM LA PLACE TO RESERVE IN ST JOHN THE BAPTIST
PARISH...ETC

H. STORM EFFECTS...

TORNADO		2 DEAD	32 INJURED
HURRICANE	4 DEAD	UNKNOWN	2 MISSING

AN ESTIMATED ONE AND ONE QUARTER MILLION PEOPLE EVACUATED
ACROSS SOUTHEAST AND SOUTH CENTRAL LOUISIANA...ETC

Appendix B**TROPICAL CYCLONE ASSESSMENT AND WARNING PRODUCT IDENTIFIERS**

<u>AREA</u>	<u>WMO</u>	<u>AWIPS</u>
Caribbean	CA	#
North Atlantic and Caribbean	NT	AT
East Pacific	PZ	EP
Central Pacific	PA	CP
West Pacific	PW	WP
North Pacific	PN	#
West North Pacific	PQ	#
South Pacific	PS	#
Indian Ocean	IO	#
South Indian Ocean	XS	#

<u>Issuing Office</u>	<u>WMO CCCC</u>
WFO HNL/CPHC - Honolulu	PHFO
WFO Guam	PGUM
JTWC - Pearl Harbor	PGTW
NHC - Miami	KNHC
NAVPACMETOCCEN - Naval Pacific Metr. And Oceanography Center - Pearl Harbor	PHNC
Offutt AFB	KGWC

<u>PRODUCT TITLES</u>	<u>WMO HEADER</u>	<u>PRODUCT IDENTIFIER (NNNXXX)</u>	<u>NWWS BACKUP HEADERS</u>
<u>Tropical Weather Outlook</u>			
Atlantic Basin	ABNT20 KNHC	TWOAT	NFDTWOAT
Eastern Pacific	ABPZ20 KNHC	TWOEP	NFDTWOEP
Central Pacific	ACPN50 PHFO	TWOCN	MIATWOCN
San Juan - Spanish	ACCA62 TJSJ	TWOSPN	MIATWOSPN
<u>Tropical Weather Discussion</u>			
Atlantic Basin	AXNT20 KNHC	TWDAT	NFDTWDAT
Eastern Pacific	AXPZ20 KNHC	TWDEP	NFDTWDEP
Western North and South Pacific	ACPW40 PHFO	TWDPW	MIATWDPW

Central North and South Pacific

ACPA40 PHFO

TWDPA

MIATWDPA

<u>PRODUCT TITLES</u>	<u>WMO HEADER</u>	<u>PRODUCT IDENTIFIER (NNNXXX)</u>	<u>NWWS BACKUP HEADERS</u>
<u>Tropical/Subtropical Cyclone Public Advisory</u>			
Atlantic Basin	WTNT31-35 KNHC	TCPAT1-5	NFDTCPAT1-5
San Juan - Spanish	WTCA41-45 TJSJ	TCPSP1-5	
Eastern Pacific	WTPZ31-35 KNHC	TCPEP1-5	NFDTTCPEP1-5
Central Pacific	WTPA31-35 PHFO	TCPCP1-5	MIATCPCP1-5
Western Pacific	WTPQ31-35 PGUM	TCPPQ1-5	N/A
<u>Public Advisory</u> (formally Storm Summary)			
Conterminous US - HPC issued	WTNT31-35 KWNH	TCPAT1-5	
<u>Tropical Cyclone Strike Probabilities</u>			
Atlantic Basin Only	WTNT71-75 KNHC	SPFAT1-5	NFDSPFAT1-5
<u>Tropical/Subtropical Cyclone Forecast/Advisory</u>			
Atlantic Basin	WTNT21-25 KNHC	TCMAT1-5	NFDTTCMAT1-5
Eastern Pacific	WTPZ21-25 KNHC	TCMEP1-5	NFDTTCMEP1-5
Central Pacific	WTPA21-25 PHFO	TCMCP1-5	MIATCMCP1-5
<u>Tropical Cyclone Discussion</u>			
Atlantic Basin	WTNT41-45 KNHC	TCDAT1-5	NFDTCDAT1-5
Eastern Pacific	WTPZ41-45 KNHC	TCDEP1-5	NFDTTCDEP1-5
Central Pacific	WTPA41-45 PHFO	TCDCP1-5	MIATCDCP1-5
<u>Prognostic Reasoning of Warnings for NW Pacific</u>	WDPN31-36 PGTW	N/A	N/A
<u>Tropical Cyclone Position Estimate</u>			
Atlantic Basin	WTNT51 KNHC	TCEAT	NFDTCEAT
Eastern Pacific	WTPZ51 KNHC	TCEEP	NFDTTCEEP
Central Pacific	WTPA50 PHFO	TCECP	MIATCECP
Western North Pacific	WTPQ51-55 PGUM	TCEPQ1-5	N/A
<u>Tropical Cyclone Position and Intensity from Satellite Data</u>			
NW Pacific	TPPN10 PGTW	N/A	N/A
SW Pacific	TPPS10 PGTW	N/A	N/A

S Pacific East 120W-160E	TXPS40 PHFO	TCSEP	N/A
N central Pacific 140W-180	TXPN40 PHFO	TCSCP	N/A
N Indian Ocean	TPIO10 PGTW	N/A	N/A
S Indian Ocean	TPXS10 PGTW	N/A	N/A
NW Pacific	TPPN10 KGWC		
SW Pacific	TPPS10 KGWC		

<u>PRODUCT TITLES</u>	<u>WMO HEADER</u>	<u>PRODUCT IDENTIFIER (NNNXXX)</u>	<u>NWWS BACKUP HEADERS</u>
NE Pacific	TPPZ1 KGWC		
North Indian Ocean	TPIO10 KGWC		
South Indian Ocean	TPXS10 KGWC		
Atlantic	TPNT KGWC		

Tropical Cyclone Formation Alert Message

Issued by JTWC			
Northwest Pacific	WTPN21-25 PGTW	N/A	N/A
Southwest Pacific	WTPS21-25 PGTW	N/A	N/A
North Indian Ocean	WTIO21-25 PGTW	N/A	N/A
South Indian Ocean	WTXS21-25 PGTW	N/A	N/A
Issued by NAVPACMETOCCEN			
Southeast Pacific	WTPS21-25 PHNC	N/A	N/A

Tropical Cyclone Update

Atlantic Basin	WTNT61 KNHC	TCUAT	NFDTCUAT
Eastern Pacific	WTPZ61 KNHC	TCUEP	NFDTCUEP
Central Pacific	WTPA60 PHFO	TCUCP	MIATCUCP

Tropical Cyclone Warnings

Northwest Pacific	WTPN31-35 PGTW	TCPWP1-5	N/A
Southwest Pacific	WTPS31-35 PGTW	N/A	N/A
North Indian Ocean	WTIO31-35 PGTW	N/A	N/A
South Indian Ocean	WTXS31-35 PGTW	N/A	N/A

Special Tropical Disturbance Statement

Atlantic Basin	WONT41 KNHC	DSAAT	NFDDSAAT
Eastern Pacific	WOPZ41 KNHC	DSAEP	NFDDSAEP
Central Pacific	ACPA80 PHFO	DSACP	MIADSACP
Western Pacific	ABPW10 PGTW	N/A	N/A
Indian Ocean	ABIO10 PGTW	N/A	N/A

Tropical Weather Summary

Atlantic Basin	ABNT30 KNHC	TWSAT	NFDTWSAT
Eastern Pacific	ABPZ30 KNHC	TWSEP	NFDTWSEP
Central Pacific	ACPN60 PHFO	TWSCP	MIATWSCP

Satellite Interpretation Message

Hawaiian Islands	ATHW40 PHFO	SIMHI	N/A
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Satellite-Derived Rainfall

Eastern Caribbean	TCCA21 KNHC	STDECA	N/A
Central Caribbean	TCCA22 KNHC	STDCCA	N/A
Western Caribbean	TCCA23 KNHC	STDWCA	N/A

		PRODUCT IDENTIFIER (NNNXXX)	NWWS BACKUP
<u>PRODUCT TITLE</u>	<u>WMO HEADER</u>		
<u>HEADERS</u>			

Aircraft Reconnaissance Messages Reports-Atlantic Basin

Routine Report	URNT10 KNHC	REPNT0	N/A
Tropical Cyclone Report	URNT11 KNHC	REPNT1	N/A
Vortex Data Message	URNT12 KNHC	REPNT2	N/A
Dropsonde Report	UZNT13 KNHC	REPNT3	N/A
Dropsonde Report	UZNT13 KWBC	REPNT3	N/A
Supplemental Vortex data Message	URNT14 KNHC	REPNT4	N/A
Airbourne Expendable Bathythermograph	SOVX81 KNHC	OCDXBT	

Aircraft Reconnaissance Messages-Pacific Basin

Routine Report	URPN10 KNHC	REPPN0	N/A
Tropical Cyclone Report	URPN11 KNHC	REPPN1	N/A
Vortex Data Message	URPN12 KNHC	REPPN2	N/A
Dropsonde Report	UZPN13 KNHC	REPPN3	N/A
Dropsonde Report	UZPN13 KWBC	REPPN3	N/A
Supplemental Vortex data Message	URPN14 KNHC	REPPN4	N/A

**Summer/Winter Reconnaissance
Schedule [Atlantic/Pacific]**

NOUS42 KNHC	REPRPD	N/A
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Hurricane Local Statement

Atlantic	WTUS(81-84) KCCC HLSNNN	N/A
San Juan	WWCA31 TJSJ HLSSJU	
Central Pacific (All Hawaiian Islands)	WTHW80 PHFO HLSHFO	N/A
Western Pacific (Guam)	WTPQ81-85 PGUM HLSPQ1-5	N/A
(Pohnei)	WTKA80 PTPP HLSTTP	
(Chuuk)	WTKA80 PTKK HLSTKK	
(Koror)	WTKA80 PTKR HLSTKR	

(Yap)	WTKA80 PTYA	HLSTYA
(Majuro)	WTKA80 PKMR	HLSKMR
South Pacific		
(Pago Pago, American Samoa)	WTZS81-85 NSTU	HLSP(1-5)

Tropical Cyclone Objective Guidance Products

Atlantic Basin	WHXX01 KMIA	CHGHUR	N/A
Pacific Basin	WHXX01 KWBC	CHGE77	N/A
Atlantic Basin	WHXX04 KWBC	CHGQLM	N/A

N/A indicates currently none assigned.

<u>PRODUCT TITLE</u> <u>HEADERS</u>	<u>WMO HEADER</u>	<u>PRODUCT IDENTIFIER</u> <u>(NNNXXX)</u>	<u>NWWS BACKUP</u>
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Aviation Tropical Cyclone Advisory Message

Atlantic Basin	FKNT21-25 KNHC
East Pacific	FKPZ21-25 KNHC
Central Pacific	FKPA21-25 PHFO